

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings of claims in the application:

1. (Currently Amended) A photosensitive apparatus, comprising:

a first video line, having associated therewith a first set of active photosensors, each active photosensor outputting a signal representative of light intensity thereon onto the first video line;

a first correction capacitor associated with the first video line, the correction capacitor adapted to retain a correction charge thereon to influence signals from the active photosensors on the first video line;

at least one dark photosensor, the dark photosensor being adapted to receive no light thereon, outputting a reference signal onto the first video line;

a second video line, having associated therewith a second set of active photosensors, each active photosensor outputting a signal representative of light intensity thereon onto the second video line;

a second correction capacitor associated with the second video line, the correction capacitor adapted to retain a correction charge thereon to influence signals from the active photosensors on the second video line;

a multiplexing node, accepting signals from the first video line and the second video line; and

final correction means for performing an offset correction operation on signals downstream of the multiplexing node, the final correction means including a main correction capacitor associated with the multiplexing node, the main correction capacitor retaining a correction charge thereon to influence the voltage signals from the active photosensors from the first video line and the second video line; and

means for determining the correction charge on the main correction capacitor, said determining means including means for sampling a plurality of voltage signals from the dark photosensor over time and deriving the correction

charge based on a plurality of sampled voltage signals from the dark photosensor.

2. (Original) The apparatus of **claim 1**, wherein there exists no amplifier between the first correction capacitor and the multiplexing node, and no amplifier between the second correction capacitor and the multiplexing node.

3. (Original) The apparatus of **claim 1**, further comprising  
for each of the first video line and the second video line, a multiplexing transistor disposed between the correction capacitor and the multiplexing node.

4. (Original) The apparatus of **claim 1**, further comprising  
for each of the first video line and the second video line, means for forcing a reference voltage onto the correction capacitor.

5. (Cancelled)

6. (Cancelled)

7. (Cancelled)

8. (Currently Amended) The apparatus of ~~claim 7~~ **claim 1**, the determining means including means for applying a voltage related to an average of the plurality of voltage signals from the at least one dark photosensor to the correction capacitor.

9. (Original) The apparatus of **claim 8**, the determining means including an RC circuit, and  
means for transferring a plurality of voltage signals from the at least one dark photosensor to the RC circuit.

10. (Original) The apparatus of **claim 1**, wherein the first video line is associated with odd photosensors in a linear array, and the second video line is associated with even photosensors in a linear array.

11. (Currently Amended) A method of operating a photosensitive apparatus, the apparatus comprising:

a first video line, having associated therewith a first set of active photosensors, each active photosensor outputting a signal representative of light intensity thereon onto the first video line;

a second video line, having associated therewith a second set of active photosensors, each active photosensor outputting a signal representative of light intensity thereon onto the second video line; and

a multiplexing node, accepting signals from the first video line and the second video line; and

at least one dark photosensor, the dark photosensor being adapted to receive no light thereon, outputting a reference signal onto the first video line;

the method comprising the steps of:

performing a first offset-correction operation on signals on the first video line;

performing a second offset-correction operation on signals on the second video line;

following the first and second offset-correction operations, multiplexing the signals on the first video line and the second video line at the multiplexing node;

sampling a plurality of voltage signals from at least one dark photosensor over time; and

performing a final offset-correction operation on signals downstream of the multiplexing node, the final offset-correction step including a main correction capacitor influencing voltage signals on the multiplexing node.

12. (Original) The method of **claim 11**, wherein there exists no amplifier between the first correction capacitor and the multiplexing node, and no amplifier between the second correction capacitor and the multiplexing node.

13. (Original) The method of **claim 11**, the offset-correction operations on the first and second video line comprising the steps of

a first correction capacitor associated with the first video line influencing the voltage signals from the active photosensors on the first video line;

a second correction capacitor associated with the second video line influencing the voltage signals from the active photosensors on the second video line.

14. (Original) The method of **claim 13**, the offset-correction operations on the first and second video line comprising the step of

for each of the first video line and the second video line, forcing a reference voltage onto the correction capacitor.

15. (Cancelled)

16. (Currently Amended) The method of ~~claim 15~~ **claim 11**, further comprising the step of

determining a correction charge on the main correction capacitor.

17. (Cancelled)

18. (Currently Amended) The method of ~~claim 17~~ claim 11, the determining step including applying a voltage related to an average of the plurality of voltage signals from the at least one dark photosensor to the main correction capacitor.

19. (Original) The method of **claim 11**, wherein the first video line is associated with odd photosensors in a linear array, and the second video line is associated with even photosensors in a linear array.